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4. The pharmaceutical composition of Claim 3 wherein said tissue-specific promoter comprises a liver-specific promoter.

5. The pharmaceutical composition of Claim 2 wherein at least one of said first and second nucleotide sequences comprises a human growth hormone polyadenylation signal.

6. The pharmaceutical composition of Claim 2, wherein said first nucleotide sequence encodes the light chain of Factor VIII protein; and wherein said second nucleotide sequence encodes the heavy chain of Factor VIII protein.

7. The pharmaceutical composition of Claim 2 wherein at least one of said first and second nucleotide sequences further comprises a promoter from the human elongation factor 1 α gene.

8. A pharmaceutical composition comprising a recombinant adeno-associated virion comprising a nucleotide sequence encoding at least one functional Factor VIII subunit, operably linked to a tissue-specific promoter.

9. The pharmaceutical composition of Claim 8 encoding a functional Factor VIII protein.

10. The pharmaceutical composition of Claim 8 wherein said tissue-specific promoter comprises a liver-specific promoter.

11. The pharmaceutical composition of Claim 8 wherein said nucleotide sequence comprises a heavy chain and a light chain, and wherein said nucleotide sequence further comprises a junction that operably links said heavy chain and said light chain.

12. The pharmaceutical composition of Claim 11, wherein said junction has the amino acid sequence Ser-Phe.

13. The pharmaceutical composition of Claim 11, wherein said junction has the amino acid sequence of SEQ ID NO:15.

14. The pharmaceutical composition of Claim 8, wherein said nucleotide sequence comprises SEQ ID NO:13.

15. The pharmaceutical composition of Claim 8, wherein said nucleotide sequence comprises SEQ ID NO:14.

16. The pharmaceutical composition of Claim 10, wherein said promoter comprises the HNF-3 albumin promoter.